REMARKS

Claims 1-2, 4-19 and 32 are pending in the application.

In the Office Action, the Examiner suggested insertion of continuing data at the beginning of the specification. Applicant has added a Cross-Reference To Related Applications section as the Examiner suggested. Applicant has also added an Abstract. Applicant submits that no new matter has been added.

The Examiner objected to claims 4-19 under 37 CFR Section 1.75(c) as being of improper dependent form. The Examiner also properly noted that a multiple dependent claim cannot depend from another multiple dependent claim. Accordingly, Applicant has amended claims 4-19 to remove the multiple dependency and place them in a proper dependent form using a "wherein" clause.

The Examiner objected to claim 14 for using the phrase "preferably" and suggested a separate claim. Applicant has deleted that phrase in claim 14 and added new claim 32 according to the Examiner's suggestions.

The Examiner rejected claim 16 under 35 U.S.C. Section 112, second paragraph, as being indefinite for using the phrase "or the like". Applicant has deleted the phrase in question.

More substantively, the Examiner rejected claims 1-3, 5, 6, 8, 12 and 19 under 35 U.S.C. Section 102(b) as being anticipated by EP 0 336 520 ('520 reference), rejected the same claims under 35 U.S.C. Section 103(a) as being obvious under the '520 reference in view of Rose (US Patent No. 3804811). The Examiner also rejected claims 1-19 under 35 U.S.C. Section 103(a) as being obvious under the '520 reference in view of Nelson (US Patent No. 5597891). Although Applicant has amended claim 1, Applicant respectfully traverses the rejections to the extent that they apply to the amended claims.

Claim 1 has been amended to incorporate the language of claim 3 and a portion of unelected claim 20 regarding the use of a conveying device as discussed more fully below.

The present invention as claimed in claim 1 as amended is concerned with drying and degassing of flake-shaped polycondensate at a temperature below the melting point of the polycondensate. To do so, care should be taken to make sure that the still solid polycondensate will not escape via the degassing opening. These polycondensate flakes or chips are relatively light-weight and are prone to be sucked into the degassing opening where

a vacuum is applied. This may lead to clogging of the degassing opening.

According to the principles of the invention, a conveying device such as shown in FIG. 1 as element 17 is used to convey the polycondensate flakes escaping through the degassing opening (see 14 in FIG. 1) back into the extruder. This provides the advantage of efficient drying without any clogging of the degassing opening.

This advantageous feature is recited in claim 1 as "using a conveying device at a degassing opening in order to convey polycondensate escaping via the degassing opening back into the extruder". None of the cited references teach or suggest such a feature as claimed in claim 1.

EP 0 336 520 A1 (Burlet) carries out a postcondensation of the polymer in the solid state (SSP) which requires appropriate conditions such as dwell time, temperature and pressure during the SSP phase while the polymer is in the solid state. Thus, it is not surprising that Burlet teaches very high vacuum performance and low pressure values (10 mbar and less) as well as an arrangement of two or even three extruders in series in order to achieve long dwell times.

US 3 804 811 (Rose) performs a solid state postcondensation,reaction, in a manner similar to Rose, in order to improve the mechanical properties of the polymer material. Although the polymer material treated by Rose may have the shape of flakes, Rose uses long dwell times in the oven.

Both Burlet and Rose use long dwell times of the polymer material/polycondensate in the solid sate. To do so, Burlet uses long process zones in each of the extruders and/or several extrudes arranged in series, while Rose explicitly mentions dwell times of up to 16 hours in the oven.

Rather than performing an SSP in order to increase the average molecular weight (and the intrinsic viscosity, IV) of the polycondensate while the polycondensate flakes are still in the solid state just after entering the extruder, the present invention uses shorter dwell times of the polycondensate flakes in the extruder in order to simply dry the flakes before melting the flakes in the extruder.

It should be pointed out that hydrolysis (splitting of ester bonds by water molecules) is a very fast reaction, indeed much faster than size reduction of the polycondensate molecules by oxidation or by radicals. It is an object of the present invention to avoid any increase in intrinsic viscosity in the first conveying zone 11 and merely dry the polycondensate in order

to make sure that during the subsequent melting in the second conveying zone 12, hydrolysis (intrinsic viscosity reduction) is kept at a minimum.

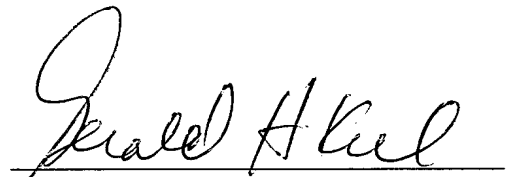
US 5 597 891 (Nelson) teaches a method of removing acetaledhyde from polyester in the molten state using a vented extruder.

WO 98/40194 (Fredl) teaches a method of recycling PET flakes by first melting and granulating the PET flakes to be recycled followed by solid state polycondensation of the PET granules.

Both Nelson and Fredl fail to teach solid stating of polycondensate flakes before melting of these flakes takes place as taught by the present invention.

Based upon the above amendments and remarks, Applicant respectfully requests reconsideration of this application and its earlier allowance. Should the Examiner feel that a telephone conference with Applicants' attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

Respectfully submitted,



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